



LAST CALL FOR ENERGY REFORM

Oil and gas output and revenue are falling, and reserves are running dry. The need to move to deepwater exploration provides President Calderón's team with a unique opportunity to reform Mexico's complicated legal and regulatory framework, argues Rogelio López-Velarde of López Velarde Hefty y Soria

President Calderón took office in December. This is the last call for Mexico to reform its energy sector: the Calderón administration and Mexico's Congress have six years to make it happen, otherwise future generations will regret it.

The Mexican economy does not rely on oil export earnings. Nonetheless, the Mexican government is hopelessly dependent on these revenues: close to 38 per cent of the federal budget comes from Pemex. Without a major tax reform, this dependency will continue to grow, to the detriment of the nation.

More than 65 per cent of Pemex's output (around 2 million barrels per day), however, comes from a single field, Cantarell, which in 2005 started to rapidly decline. By 2007, Cantarell production will be decreasing by 14 per cent per year. Despite government efforts to reverse the fall with nitrogen injection and by increasing upstream activities in Ku-Maloob-Zaap, Chicontepec, Lankahuasa and others, these endeavours will not be enough to maintain the production levels and present export earnings. And although Pemex has recently achieved a 37 per cent reserves restitution rate, this rate is far below international standards.

Because of the crude oil prices of the past three years, Pemex has exceeded expectations and budgeted revenues, but was also able to increase production. Nevertheless, as prices start to move down and fields start to decline, Pemex will need to look elsewhere, especially considering that Mexico no longer has major reserves in shallow waters. Although Pemex is fully aware of where the market is going worldwide and the need to move to deepwater, it is also aware that the present contractual schemes with which it receives services from oilfield service companies may not be suitable for undertaking extensive deepwater exploration and production.

Investment will also become more of a problem. More than 82 per cent of Pemex's revenues from oil production are levied as taxes by the federal government. All revenues are surrendered to the Ministry of Finance (Hacienda) which then in turn provides

limited funding to Pemex for its own activities, based on the budgetary allocation originally approved by Congress.

But legislators have never shown an interest in investing in Mexico's petroleum industry on anything other than a short-term basis. Consequently, Pemex has historically neglected to invest in exploration of new fields and reserves of crude oil and natural gas, and focused its efforts on the vast Cantarell field. During the three governments preceding President Fox, Pemex was only authorised to invest US\$2.8 billion per year, although it required at least US\$6 billion. Production of refined products is in a worse situation. Mexico imports most of the refined products and petrochemicals, and in some instances has imported close to 20 per cent of the natural gas available in Mexico.

There is no doubt that Pemex has the potential to turn this situation around. According to the last testimony delivered before Congress by the former CEO of Pemex, the company has identified prospective (not proven) reserves of close to 54 billion barrels of crude, which is more than 117 per cent of the existing proved, probable and possible reserves formerly reported. Alas, the bad news is that Pemex does not have the resources and the contract structures to develop such reserves.

Navigating a legal minefield

Pemex's inability to fully exploit its potential can be attributed, at least in part, to the paradoxes, myths and flaws which infuse Mexico's oil and gas laws and regulations. One example is the legal standing of Mexico's nationalised energy company. Pemex's monopoly is not contained within the constitution, which only prescribes that all domestic hydrocarbons permanently belong to the nation (something that is very common in all constitutions), that no concessions are allowed for the exploration and exploitation of such hydrocarbons, and finally that the petroleum industry is exclusively reserved to the state.

It was through implementing legislation in 1958 (the petroleum law) that Congress unduly expanded this constitutional mandate

by defining the term 'petroleum industry', to include all of the industrial and commercial activities related to the oil, natural gas, oil derivatives and basic petrochemical industry. This step created the largest vertically integrated monopoly in the world. Even foreign trade of such commodities has been monopolised by Pemex. For instance, refining is not established in the constitution as an activity that can only be undertaken by Pemex, but the petroleum law reserved this for Pemex even in cases where the oil is imported by a third party.

Thus, a legal reform, not a constitutional amendment, should suffice in order to allow competition and private investment in some of the activities that have been reserved to Pemex – in the same way that back in 1995, Congress allowed competition and private participation in the natural gas midstream and downstream industry.

It is absurd, for instance, that Pemex is allowed to have joint ventures for the construction and operation of refineries abroad (eg, the 50–50 joint venture between Pemex and Shell for the Deepark refinery in Texas), and invest and create jobs in other parts of the world, but it is not allowed to have strategic alliances in Mexico. Pemex–Refinación desperately needs to upgrade Tula, Salamanca and Salina Cruz refineries, and at least build one new refinery, in order to offset the massive imports on gasoline and oil derivatives, but those huge investments and risks should not be exclusively taken by Pemex through fiscal resources. Allowing private investment in refining only requires a simple majority vote of Congress, and this is one of the sectors that should be liberalised during this administration.

A confused structure for private investment, and underinvestment, has also affected downstream operations. Since the mid-1980s, Pemex has not fully maintained its collection, gathering and transportation pipeline systems. As a result, there have been several accidents in Veracruz and Tabasco, where most pipes are. Transportation of most industrial fuels remain under Pemex's monopoly, with its limited budgetary approval for maintenance, and no money

for expansion. Meanwhile, LPG distribution is under the monopolistic control of a few Mexican companies and, inexplicably, foreigners are banned from investing in this sector although they have been asked by the government to invest in natural gas distribution. Liquid pipelines and terminals should also be liberalised so that any party may build, own and operate them, subject to regulatory oversight.

The 1958 petroleum law has other flaws. Unlike other state-owned oil companies, under this legislation Pemex is barred from paying in kind for the services furnished by its contractors (meaning it must always pay with currency, which in many instances means hard currency), and is banned from using its own production as a means of payment, which is very common in other countries. The company is also prohibited from granting its own output as a consideration for the provision of services. In other words, Pemex is not allowed to finance its own development with its own resources and it has to depend on the budgetary allocations given by Hacienda.

This statutory restriction (again, not a constitutional provision) has been interpreted to mean that Pemex is also barred from entering into performance contracts, which is obviously ludicrous. The most obvious example is in the liquid natural gas industry, in which Mexicans are allowed to invest in LNG regasification terminals, but are barred from investing in a gas field. A consortium formed by Shell-Mitsui-Total has just commissioned a regasification terminal in Altamira close to the gas-rich reserves of the Burgos basin. This expensive terminal is being funded by the state to import gas from other parts of the world, instead of investing this money and creating jobs in developing the Burgos basin in Mexico, and allowing private producers to assume production of the existing gas reservoirs.

Although efforts have been made to allow private companies to develop gas fields in the Burgos basin through the multiple services contracts programme, existing regulatory restrictions and Pemex's inability to create more aggressive contractual schemes means that the original programme has been downsized. This is because private companies, unable to book reserves or have an upside in the participation under the Pemex model, have preferred to move to other jurisdictions.

The third integral defect in the 1958 petroleum law is the prohibition of risk services contracts. After expropriation in 1938, Mexico continued to allow risk service contracts, and relevant laws in 1940 and 1941 in fact expressly permitted production-

sharing agreements. Both risk service contracts and production-sharing agreements are very common in all jurisdictions.

But the 1960 constitutional amendment to article 27 and the enactment of the 1958 petroleum law outlawed exploration and production concessions and risk service contracts. Thus, the assertion that President Cardenas prohibited risk service contracts as of the 1938 expropriation is simply wrong. Cardenas and the succeeding presidents continued to use risk service contracts and production sharing agreements until President López Mateos created Pemex's vertically integrated monopoly in 1958.

If Pemex were allowed to entertain transactions in which contractors could participate in the proceeds of production, then the company would finally be able to make business alliances and joint ventures with other companies. Marginal fields and non-associated gas fields should be the first projects to use those new types of contractual schemes. The decline of production in Cantarell and its consequent pressure on the federal budget will create the required environment to support alliances with international oil companies or specialised oilfield service companies for deepwater exploration and production, without the present restrictions on upside production participation.

Congress will need to introduce a legal framework aimed at allowing some sort of private investment in deepwater work, a sophisticated, capital-intensive and risky part of the industry. A special legal framework dedicated to the oil and gas industry should be passed by Congress, so Pemex contracts and business practices would be regulated based on a statute that is suitable for the oil and gas business. At present, Pemex contracts are regulated through laws designed for the construction of highways or the acquisition of medicines by a government hospital – and this cannot continue.

The final reform that the Calderón administration must undertake is to the regulatory framework. Pemex remains the sole owner, investor, operator and in many instances, the sole authority in almost all of the industrial and commercial activities related to the oil, oil derivatives, natural gas and basic petrochemical industries. The Ministry of Energy (Sener) has little authority to supervise and regulate Pemex core business. It is Hacienda, not Sener, which is the agency that controls Pemex and the industry – but this ministry only does so from the budgetary and fiscal point of view. Why should Hacienda authorise investment in exploration, in a dry gas field or a marginal field, or pipeline expansion

when it can invest the fiscal resources in Cantarell where the return is very high and immediate? Moreover, Hacienda, controlled by governmental officials working for a six-year term, by definition is not encouraged to invest in long-term projects knowing that the fiscal resources are scarce and that the return of such investment would be taken by another political administration.

It is undisputable that Pemex continues to be used as a governmental institution, a catalyst for immediate cash, not as a company. We thus need an independent agency in charge of regulating and supervising the E&P activities of Pemex and other private operators operating in fields where the return on the investment is not attractive to Pemex (the Petroleum Directorate).

This independent agency would be in charge of granting, supervising and enforcing the operating licences granted to Pemex and private operators for marginal fields or non-associated gas reserves in which Pemex is not investing. Some of its liquids midstream and downstream activities should be regulated by the Energy Regulatory Commission (CRE), which was created in 1994, and which has had a very good record in regulating the natural gas midstream and downstream industry. But the CRE does need to be fortified, because it is only quasi-independent, and subject to political influence. If the CRE is going to regulate and eventually sanction Pemex and electrical utility CFE, by definition it should be an independent agency with the necessary authority to prevail against these two strong public instrumentalities.

When it comes to corporate governance, Pemex cannot continue to be managed as it has been for decades. The company's management responds to political concerns rather than the concerns of the company. The board of directors has no independent members, and investment decisions are not made by Pemex's management, but by Hacienda through control and approval of budget for each project. The board is formed by six representatives of the Federal Government (including the heads of Sener and Hacienda) and five members of the strong Petroleum Workers Union. This structure creates inextricable conflicts of interest in defining company policies and plans, and Pemex has no clear reporting obligations to its stakeholders on productivity (the stakeholders, in this case, being the Mexican people), costs of production, revenues versus investment, and other standard reportable variables. In addition, Pemex operates under a model adopted in 1992 with four separate subsidiaries (E&P, gas, refining, and petrochemicals), which has

created several costs and limitations among subsidiaries. All of these structural problems need to change, and again Congress is the only one that can make a long-term solution to the industry.

The new Calderón administration has strong links to the energy reform agenda. After being the leader of the House of Representatives in the first half of the Fox administration, Calderón became the secretary of energy. Now, his immediate circle of advisers worked with him at Sener – for example, Juan Camilo Mouriño, the president's chief of staff, was undersecretary at Sener, and Cesar Nava, Calderón's secretary, was the former general counsel of Pemex.

President Calderón clearly knows that energy reform cannot wait any longer. The new government is aware that such reform has to be integral, but implemented on a piecemeal basis, sector by sector. His ruling party only needs the support of a number of senators and representatives from the opposition in order to pass the required legislation; a simple majority vote is required in order to promulgate many of these reforms, because constitutional amendments are not strictly necessary in order to achieve many of these changes. The reforms should not try to privatise Pemex or CFE, but only to allow the virtual cycle of competition and investment, which is of the utmost necessity to the industry.

This is the last call for energy reform, and we have the right ingredients to finally make it happen. Congress has the unique and final opportunity to reverse Pemex's decline, and make the petroleum industry the true backbone of the modernisation and development of Mexico.